



2012
OWNER'S MANUAL

Intro

Congratulations on the purchase of your new X-Fusion suspension. X-Fusion prides itself on manufacturing high-end mountain bike suspension. All of our products are made with the highest quality parts and backed by extensive R&D and ride testing. These products are derived from the passion we have for designing and riding the best bicycle suspension products available. Before you go out to share our common passion, please read this manual carefully. It will provide you with important information regarding installation, use, care & maintenance, and the warranty for your new suspension.

Fork and Shock Controls

The controls on X-Fusion bicycle forks and rear shocks consist of the following:

- Anodized red knobs: REBOUND ADJUSTMENT
- Anodized blue knobs: LOW SPEED COMPRESSION ADJUSTMENT
- Anodized blue knobs, RL products: LOCKOUT ADJUSTMENT
- Anodized gold knobs: HIGH SPEED COMPRESSION ADJUSTMENT

Dirt jumping

Dirt jumping is a particularly extreme form of riding that involves jumping from one obstacle to another. Because of the abusive nature of dirt jumping, there is no fork that been proven to be impervious to the forces created by dirt jumping. As a result, using any suspension product for this form of riding, requires the user to take extra precautions, including but not limited to constant inspection of product for potential damage caused by this extreme use, as well as frequent inspections by a qualified bicycle mechanic or X-Fusion authorized service center. Failure to do so could result in product failure, **SERIOUS INJURY OR DEATH**.

WARNING!!

DO NOT use X-Fusion bicycle suspension products on any motorized bicycle, motorized cycle or motorized vehicle, or on any vehicle carrying more than one operator or rider, such as a tandem bicycle. Any such misuse may overload the suspension and result in failure of the suspension. Suspension failure may cause a crash and result in property damage, **SERIOUS INJURY, OR DEATH**. Misuse of X-Fusion suspension products voids all X-Fusion warranties.

WARNING!!

X-Fusion suspension products contain pressurized nitrogen, air, or both. DO NOT puncture, incinerate or crush any portion of an X-Fusion suspension product. DO NOT attempt to disassemble any portion of a X-Fusion suspension product, unless expressly instructed to do so by the applicable X-Fusion technical documentation, and then ONLY while strictly adhering to all X-Fusion instructions and warnings in that instance. Failure to do so could result in SERIOUS INJURY OR DEATH.

WARNING!!

Modification, improper service, or use of aftermarket replacement parts with X-Fusion forks and shocks may cause the product to malfunction, resulting in SERIOUS INJURY OR DEATH. Do not modify any part of a fork or shock, including the fork brace (lower leg cross brace), crown, steerer, upper and lower leg tubes, or internal parts. Any unauthorized modification voids all warranties, and may cause failure of the fork or shock, resulting in SERIOUS INJURY OR DEATH.

WARNING!!

Make sure that your wheels and wheel axles are securely fastened before riding, in accordance with the bicycle owner's manual instructions. Wheels not properly secured to the bicycle may cause a crash and result in property damage, SERIOUS INJURY, OR DEATH.

WARNING!!

Before riding, verify that the brakes on your bicycle are installed and adjusted correctly in accordance with the brake manufacturer's instructions. Improperly installed and adjusted brakes may cause a crash and result in property damage, SERIOUS INJURY, OR DEATH.

WARNING!!

To avoid potential disc brake failure that could result in SERIOUS INJURY OR DEATH, the disc brake caliper mounting bolts must 1) always have 10-12 mm of thread engagement with the fork and 2) be kept to the manufacturer's torque specifications. In all cases, the disc brake caliper mounting bolt tightening torque level must never be less than the manufacturer's torque specification, or exceed 90 in-lb torque.

WARNING!!

If mounting the bicycle in a carrier designed to hold a fork by its dropouts, avoid tilting the bicycle to either side, to avoid causing structural damage to the fork. Be sure your fork is fastened securely with the quick release (the 9mm, X15 and X20 axle, with the bike carrier's thru-axle mount), and the rear wheel is properly secured. If the bicycle ever tilts on or falls from a bicycle carrier, do not ride it until it is examined by a qualified bicycle service technician, Authorized Service Center, or by X-Fusion Shox. A structurally damaged fork leg or a dropout failure can cause a loss of control, resulting in **SERIOUS INJURY OR DEATH**.

WARNING!!

When using a quick release mechanism to secure the front wheel into the X-Fusion fork that is equipped with a disc brake system and open dropouts, be sure that you adjust the quick release mechanism properly before closing it. A maladjusted quick release mechanism can lead to the front wheel suddenly separating from the bicycle at any time, including and especially when the front brake is applied. Front wheel separation during a ride can result in **SERIOUS INJURY OR DEATH**. Please follow the manufacturer's recommended instructions for installation of the wheel securing device.

WARNING!!

Never attempt to pull apart, open, disassemble, or service a X-Fusion rear shock that is in a "stuck down" condition. A "stuck down" condition results from a failure of the dynamic air seal (located between the positive and negative air chambers within the shock air sleeve), resulting with the negative chamber retaining a higher air pressure than the positive chamber. To test whether the shock is in fact "stuck down":

Remove the air cap and depress the Schrader valve, to completely release air pressure from the positive air chamber of the shock. If the shock body retracts into the air sleeve near bottom-out after the air is released from the positive air chamber, attach a X-Fusion Shox high pressure hand pump and pressurize the shock to 250 psi (17 bar). If the shock does not fully extend, it is in a "stuck down" condition.

WARNING!!

Any improper servicing procedure with X-Fusion air shocks in the “stuck down” condition can lead to **SERIOUS INJURY OR DEATH**. Contact X-Fusion Shox or an Authorized Service Center for repair.

Service Charts

Forks

Maintenance	Interval (Hours)
Clean dirt and debris from stanchion tubes	Every ride
Check air pressure (air forks only)	Every ride
Inspect upper tubes for scratches and gouges	Every ride
Lubricate dust seals and stanchion tubes	Every ride
Check torque on X-Series Axle	Every ride
Clean or replace (recommended) remote lockout cable and housing	25
Remove lowers, clean/inspect bushings and change oil bath if necessary	25
Clean and lubricate air spring assembly	50
Change oil in damping system	100
Clean and lubricate coil spring assembly (coil forks only)	100

Shocks

Maintenance	Interval (Hours)
Clean dirt and debris from shock body	Every ride
Check air pressure and set sag	Every ride
Check torque on shock mounting bolts	Every ride
Lubricate shock body	5
Remove air canister, clean and lubricate	25
Air sleeve maintenance (replace seals)	50
Full damper system rebuild and oil change	100

X- Fusion's Manufacturer Warranty

Guarantee

X-Fusion provides a 24-month warranty on all suspension products to cover defects in materials and/or workmanship. This warranty only applies to the original owner and is not transferable. To make a warranty claim, you must provide proof of purchase within the 24-month warranty period. The warranty period begins the date of purchase and will expire exactly 24 months later.

The acceptance of a warranty claim during the 24-month period is up to the discretion of X-Fusion or any Authorized Service Center acting on its behalf. X-Fusion or its agents will determine if the failure is due to workmanship, defects in materials or product abuse. The warranty guarantee will be void if the buyer does not inform the seller of the damage after its discovery within 60 days.

X-Fusion and its agents reserve the right to all final warranty or non-warranty claims.

To maintain valid the general guarantee conditions for all X-Fusion shocks it is absolutely necessary that the buyer executes the periodical maintenance and that cleaning and maintenance are carried out according to the maintenance chart within the owners manual.

Limitations of Warranty

General Exclusions from this warranty shall include but are not limited to any failures caused by:

- Installation of parts or accessories that are not qualitatively equivalent to genuine X-Fusion parts.
- Abnormal strain, neglect, abuse and/or misuse.
- Accident or collision damage.
- Modification or original parts.
- Lack of proper maintenance (see maintenance schedule)
- Any attempt to disassemble damper assembly.
- Shipping damages or loss (purchase of full value insurance is recommended)
- Damage to interior or exterior caused by improper cable routing, seat post, rocks, crashes or improper installation.
- Oil changes or service not performed by X-Fusion Authorized Service Centers.
- Coil bind/excessive spring preload (three turns maximum)

Specific exclusions from this warranty include

- Parts replaced due to normal wear and tear and/or routine maintenance.
- Parts subject to normal wear and tear and/or routine maintenance:
Bushings and reducers, seals, suspension fluids.
- Vector shocks damaged by riding with less than 180psi in the reservoir.

X-Fusion makes no other warranty of any kind, expressed or implied. All implied warranties of merchantability and fitness for a particular purpose that exceed the obligations and time limits stated in this warranty, are hereby disclaimed by X-Fusion and excluded from this warranty.

Installing your X-Fusion fork

Fork air spring maximum air pressures:

Velour, Enix, Slide, Trace, Velvet: 150 PSI (10.34 bar)
Vengeance: 200 PSI (13.78 bar)

Fork air spring minimum air pressures:

Velour Enix, Slide, Trace, Velvet: 50 PSI (3.4 bar)
Vengeance: 40 PSI (2.75 bar)

WARNING!!

It is extremely advisable to have a qualified bicycle service technician install your new X-Fusion fork onto your bicycle. If you have any doubt whether or not you can properly install your fork, then do not attempt it. Improperly installed forks can fail, causing the rider to lose control resulting in **SERIOUS INJURY OR DEATH**.

WARNING!!

Never use more than 30 mm of height of steerer stem spacers under the steerer stem, as this condition can cause the steerer tube to fail prematurely, causing a loss of control resulting in **SERIOUS INJURY OR DEATH**.

Remove the original fork from the bicycle. Measure the X-Fusion fork steerer tube against the length of the original, to confirm whether you need to cut the X-Fusion fork steerer tube.

CAUTION

Prior to any cutting, consult your headset and stem manufacture's instructions to ensure that you have enough steerer tube length for clamping the steerer. Do not notch, cut, mark or otherwise damage any part of the steerer tube below the cut area as this can cause the steerer tube to fail causing **SERIOUS INJURY OR DEATH**

Cutting Steerer Tubes

Prior to cutting the steerer tube, refer to your stem manufacture's instructions to ensure that you will have enough steerer tube length for clamping the steerer. Mark the steerer tube accordingly and cut it to proper length.

WARNING!!

If the steerer tube has any nicks or gouges, the crown/steerer tube assembly must be replaced. A nick or gouge can cause the steerer tube to fail prematurely, resulting in a loss of control of the bicycle and **SERIOUS INJURY OR DEATH**.

Always use a new threadless headset, and follow the headset manufacture's installation instructions.

WARNING!!

Never attempt to cut threads into the threadless steerers of X-Fusion forks. Cutting threads into a threadless steerer can cause the steerer tube to fail prematurely, resulting in a loss of control of the bicycle and **SERIOUS INJURY OR DEATH**.

Use a 39.8 mm crown race for 1 1/2" steerer tubes and a 29.9 mm crown race for 1 1/8" steerer tubes.

Install the star nut into the steerer tube, in accordance with the star nut manufacture's installation instructions.

WARNING!!

Never attempt to remove or replace the steerer or upper tubes independently from the crown. Modifying the integrated crown, steerer, or upper tubes can cause an assembly failure, resulting in a loss of control of the bicycle and **SERIOUS INJURY OR DEATH**.

For Single Crown-Steerer X-Fusion Forks

Install the headset bearing parts and stem in accordance with the headset manufacture's instructions, and adjust the headset preload accordingly until you feel no excessive play or bearing drag.

Tighten the stem clamping bolts to the stem manufacture's torque specifications at this time.

Install the brakes according to the brake manufacturer's instructions.

Route the front disc brake housing to the inside of the lower leg, and through the supplied disc brake housing guide.

WARNING!!

Do not allow disc brake cable to come in contact with the front wheel, tire or other moving parts of the bicycle. To confirm the cable is safely routed, have a qualified bicycle technician inspect your bicycle. Improper brake cable installation can result in **SERIOUS INJURY OR DEATH**.

Tighten the disc brake hose guide screw with a hex key wrench to 8 in-lb (0.90 Nm) torque.

CAUTION

Cable housing contacting the fork crown will cause abrasion damage to the crown over time. If contact is unavoidable, use vinyl tape or similar protection to cover the point of contact. The X-Fusion warranty does not cover abrasion damage to the X-Fusion fork crown.

CAUTION

If your fork loses oil, tops or bottoms out excessively, or makes unusual noises, immediately contact X-Fusion Shox or an Authorized X-Fusion Shox Service Center for an inspection or repair service.

CAUTION

Never use a power washer to clean your X-Fusion fork.

Installing X-15 and X-20 Axles

Position your front wheel (without the X-15 or X-20 axle) into the dropouts of the lower fork leg. Position the brake rotor between the brake pads of the disc caliper as you seat the hub shoulders squarely and firmly into the dropout counterbores.

WARNING!!

As dirt and debris can accumulate between the fork axle openings, always check and clean these areas before installing the wheel. Improper hub and axle installation can result with **SERIOUS INJURY OR DEATH**.

Insert the X-15 or X-20 axle into the fork dropout and slide it all the way through the hub, until you contact the axle nut on the opposite side.

Thread the X-15 or X-20 axle through the hub and into the opposite fork leg until it becomes firmly snug. Using hand strength only, rotate the X-15 or X-20 lever to its fully secured position with the palm of your hand. Do not use any kind of hand tool to increase leverage.

The minimum amount of torque to hold the axle in place is 70 inch pounds or 80 kg/cm. The maximum amount of torque is 100 inch pounds or 115 kg/cm.

To set the X-15 or X20 lever in a safe location unscrew the hex key and place the lever in a non-vulnerable position. The lever should be positioned between one (1) and twenty (20) mm forward of the fork leg.

CAUTION

Positioning the tightened X-15 or X-20 lever below the fork leg dropout may leave it vulnerable to hitting objects on the trail, posing a potential risk of suddenly loosening the axle. Position the tightened X-15 or X-20 lever in front of the fork leg as instructed, to minimize this risk.

Remote Lockout Lever Installation

WARNING!!

Always use the remote cable holder assembly to secure the Remote fork cable housing to the fork crown. Unsecured cable housing can snag and cause a crash, resulting in **SERIOUS INJURY OR DEATH**.

CAUTION

Slightly decrease the tightening torque for carbon handlebars. Consult the bicycle or handlebar manufacturer's documentation regarding the appropriate level of tightening torque for carbon handlebars.

WARNING!!

Do not allow the cable to come in contact with the front wheel, tire or other moving parts of the bicycle. To confirm the cable is safely routed, have a qualified bicycle technician inspect your bicycle. Improper cable installation can result in **SERIOUS INJURY OR DEATH**.

Use the following procedure for installing the X-Fusion Remote Lockout lever, for X-Fusion remote fork or rear shock products:

With a 3 mm hex key wrench, loosen the handlebar clamp bolt on the under side of the X-Fusion Remote Lockout lever assembly.

Remove the left or right hand grip from the handlebar, given which configuration you prefer.

Slide the assembly onto the handlebar. Be sure 1) the lockout release button is facing inwards towards the rider, and 2) the cable adjusting barrel is pointing towards the center of the bike, above the hand brake lever assembly. These setup criteria are true for either the left or right-hand setup configuration.

Re-install the handlebar grip.

Position the assembly so that it abuts the inner end of the grip. Be sure the grip does not interfere with the normal operation of the lockout release button.

Push the actuation lever down to its locked-out position. Rotate the assembly into position, so the actuation lever in its locked-out position does not interfere with normal thumb operation of the rear derailleur shifter.

With a 3 mm hex key wrench, tighten the handlebar clamp bolt to seven (7) in-lb (0.80 Nm) torque. Press the release button to return the assembly to its unlocked state.

Installing X-Fusion Rear Shocks

Air rear shock maximum air pressure: 300 psi (20.68 bar)

Air rear shock minimum air pressure: 60 psi (4.14 bar)

WARNING!!

Rear shock setup and configuration varies greatly between different bicycle manufacturers. Be sure to refer to the owner's manual for your bicycle. It is extremely advisable to have a qualified bicycle service technician install your new X-Fusion rear shock on your bicycle. Improperly installed rear shocks can fail, causing the rider to lose control, resulting in **SERIOUS INJURY OR DEATH**.

CAUTION

Before riding, be sure the shock mount bolts on your X-Fusion air or coil rear shocks are tightened to your bicycle manufacturer's torque specification.

CAUTION

If your bike is outfitted with a X-Fusion Vector or Vector Air model shock, never ride with the rear shock reservoir air chamber with less than 180 psi, or more than 300 psi of air pressure. Doing so can damage your X-Fusion Vector or Vector Air shock, requiring repairs not covered by the warranty.

CAUTION

If your X-Fusion rear shock loses oil, tops or bottoms out excessively or makes unusual noises, immediately contact X-Fusion Shox or an Authorized X-Fusion Shox Service Center for an inspection or repair service.

CAUTION

Never use a power washer to clean your X-Fusion rear shock.

Service Centers

USA

X-Fusion Service Center
2400 Chanticleer Ave. Suite F Santa Cruz
CA 95062
TEL: (831) 221-5047
FAX: (831) 536-4731
info@x-fusion-shox.com
www.xfusionshox.com

Argentina

VOUGA S.A.
Agustin de Vedia 3344 Capital Federal,
Buenos Aires
TEL: +5411 49180008
FAX: +5411 49180008
felipe@vouga.com.ar
www.vouga.com.ar

Australia

DIY MTB
20 BAY STREET CALLALA BAY, NSW, 2540
Australia
TEL: +61 2 4446 4636
FAX: +61 2 4446 4731
dm@diymtb.com.au
www.diymtb.com.au

Brazil

SCITEX IMP. COM. E SERV. LTDA.
Rua Carneiro Da Cunha, 872, Sao Paulo,
SP-04444-001
TEL: (11) 5587-3662
FAX: (11) 5587-3662
Scitex@scitex.com.br
www.scitex.com.br

Bulgaria

Velomania Ltd.
"Gueshevo", Street 83, 1330 Sofia
TEL: 00359 2 812 70 60
FAX: 00359 2 812 70 61
info@velomania-bg.com
www.velomania-bg.com

Canada

Rendagde Cycle Solutions
765 Malone Rd. Ladysmith, BC, V9G 1N1
TEL: 250-483-6677
info@r-c-s.ca
www.r-c-s.ca

China

ADURA BIKE
No.7, Xiangyang 2nd Garden, Feihu Rd.
Ludu Town, Taicang City, Jiangsu, China
TEL: +86-512-5666-8333 / 0512-56668333
hill_xvt@163.com
www.adurabikes.com

Chile

BIKEPLANET/SL
AV. IV CENTENARIO 1015, LAS CONDES,
SANTIAGO,
TEL: +56-9-92261093
FAX: +56-2-2171767
rnufo@bikeplanet.cl

Croatia

Alan Prim d.o.o.
Jandriceva 39; 10000 Zagreb, Croatia;
Europe
TEL: 38514673206
FAX: 38514673206
alanprim@gmail.com

Czech Republic

Schindler spol. s.r.o.
Slezská 101/112, 747 27 Koberice, Czech
Republic
TEL: +606 426 855
FAX: +553 657 809
info@x-fusion.cz
http://www.x-fusion.cz

France

Exhaus Racing
17 rue Jean de la Fontaine PORDIC, 22590
France
TEL: +33(0)296582791
FAX: +33(0)296582791
contact@exhausracing.com
www.exhausracing.com

Germany

KOEHN
Göttinger Chaussee 12-14 / Halle P2a,
D-30453 Hannover Germany
TEL: +49 (0) 511 473204 0
FAX: +49 (0) 511 473204 49
info@x-fusion-shox.de
www.x-fusion-shox.de

Hungary

MR-Projekt Bikes
Jerkő u. 25, Debrecen Hajdú-Bihar
Hungary 4032
TEL: +36-70-318-317-8
info@bikediskont.hu

Indonesia

Bagus Bike
Bumi Serpong Damai, Komp. Ruko Sektor 7
Blok RN 61, Tangerang 15010, Indonesia.
TEL: +6221 537 1115
FAX: +6221 537 5912
bagusbike@cbn.net.id

Israel

RONOFUN
Terech Hayam 3, 22806, ISRAEL
TEL: +972-49522334
FAX: +972 49521190
ranofun@gmail.com
www.ranofun.co.il

Italy

BCS srl.
Via Monte Leone 4, 39010 Cermes BZ, Italy
TEL: 0039 0473 563107
FAX: 0039 0473 559630
info@bikespi.it
www.bikesuspension.com

Japan

AKI CORPORATION LIMITED
1-10-2 HASHIBANISHIMO-CHO,
MORIGUCHI-CITY, OSAKA, JAPAN,
570-0039
TEL: 06-6995-7880
FAX: 06-6995-7884
sakuma@akiworld.co.jp
www.akiworld.co.jp

Korea

Daejin International
977-6, Daejam-Dong, Nam-Gu, Pohang-Si,
Gyeongsangbuk-do, 790-826
TEL: +82-54-275-2216
FAX: +82-54-275-2217
info.bianchi@yahoo.co.kr
www.daejin-inc.com

Malaysia

Sen Aik Trading
12-1-1, Jalan Setia Prima Q U13/Q, Setia
Alam, Sek U13, 40170 Shah Alam, Selangor
Darul Ehsan, Malaysia.
TEL: 603-33431050
FAX: 603-33431050
yeang@senaik.com
www.senaik.com

New Zealand

KRD Imports
Unit 2 / 42 Maces Road, Bromley,
Christchurch, NZ
TEL: +64 3 3764060
FAX: +64 3 3764064
x-fusion@krdimports.co.nz
www.krdimports.co.nz

Philippines

Peregrine Marketing
E.O. Perez St. Subangdaku, North
Reclamation, Mandaue City, Cebu,
Philippine
TEL: +032 233 0352
sales@peregrinebike.com

Poland

Bikershop
UL.PUSZKARSKA 7 30-644 KRAKOW
TEL: +48 12 255 99 00
jacek@bikershop.pl

Portugal

Soc.Comercial do Vouga, Lda- Joaquim
Carvalho Rua Cabede e Lencastre, 33-39
3750-177 AGUEDA, PORTUGAL
TEL: +351234601500
FAX: +351234601159
carvalho@scvouga.pt

Russia

Teammano Co.
18 GSK Severniy Signalniy proezd
TEL: +89162431170
shop@teammano.ru

Singapore

Bike Labz
Blk 3012 #03-2018 Bedok Ind Park E
#03-2018, Singapore 489978
TEL: +65 64412426
sales@bikelabz.com
www.bikelabz.com

Slovakia

Schindler spol. s.r.o.
Slezská 101/112, 747 27 Koberice, Czech
Republic
TEL: +606 426 855
FAX: +553 657 808
info@x-fusion.cz
www.x-fusion.cz

South Africa

De Wet Sports
Prime Park, Printers Way, Montague
Gardens, 7441, South Africa
TEL: +27 21 551 5228
FAX: +27 21 551 5229
cycles@dwetsports.co.za
www.dwetsports.co.za

Spain

FunSport Express
c/ Lluís, 63-69 bajos 08005 Barcelona
TEL: +34 93 485 0006
info@funsportexpress.com
www.funsportexpress.com

Switzerland

Riders Elements
Lyssachstrasse 108 3400, Burgdorf Schweiz
/ Switzerland
TEL: +41 (34) 422 47 11
FAX: +41 (34) 422 47 12
info@riders-elements.ch
www.riders-elements.ch

Taiwan

Iron Stable
No. 260, Kuang-Cheng Lane, Nei-Tung
Road, Houli Shiang, Taichung Country,
Taiwan.
TEL: 04 25575422
FAX: 04 25567528
contact@ironstable.com.tw
www.ironstable.com.tw

United Kingdom

Upgrade Bikes Ltd
23 Star Road, Partridge Green, West
Sussex, RH13 8RA, United Kingdom
TEL: +44 (0) 1403 711 611
FAX: +44 (0) 1403 710 753
Info@Upgradebikes.co.uk
http://www.upgradebikes.co.uk/index.html



www.XFUSIONSHOX.com